#### CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

## maintained by the

# CALIFORNIA DEPARTMENT OF FISH AND GAME

# and supported by the

## CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP Database Version 8.1 (2005)

R049 Sharp-tailed Snake Contia tenuis

Family: Colubridae Order: Squamata Class: Reptilia

Written by: S. Morey Reviewed by: T. Papenfuss Edited by: R. Duke

### DISTRIBUTION, ABUNDANCE, AND SEASONALITY

This secretive little snake is common in suitable habitats throughout its range in California. It occurs in the Siskiyou and Cascade ranges in the north, along the Coast Ranges from Eureka in Humboldt Co. to central San Luis Obispo Co. Generally absent from the Central Valley, it is found the length of the Sierra at middle and low elevations on the west slope. Elevation sea level to perhaps 2130 m (7000 ft) in the central and southern Sierra. Occurs in a wide variety of habitats.

### SPECIFIC HABITAT REQUIREMENTS

Feeding: This snake appears to be specialized for eating slugs (Zweifel 1954). The only recognizable food items found in a series of museum specimens examined by Woodin (unpubl.) were slugs, but Stebbins (1954) suggested that small plethodontid salamanders (Batrachoseps and young Aneides) may also be taken.

Cover: Sharp-tailed snakes are seldom seen in the open. Most of their activity takes place under surface objects such as flat rocks, loose bark on logs, woodpiles, and other human debris. Subterranean activity is suggested by the discovery by McLean (1927) of an individual at a depth of 2.5 m (8 ft) underground during construction in the central Sierra footbills.

Reproduction: Little is known about habitat requirements for reproduction. Nussbaum et al. (1983) report egg clutches apparently laid in soil from 7 to 15 cm (2.8 to 6 in) deep in rock outcrops and among the roots of grass.

Water: Little information on water requirements. Sharp-tailed snakes are usually encountered in somewhat moist microhabitats often near intermittent streams.

Pattern: Sharp-tailed snakes occur in a wide variety of habitats within their range but are most common wherever conditions are somewhat moist and surface debris is present.

### SPECIES LIFE HISTORY

Activity Patterns: The warmer periods of early spring, and following the first rains of fall are the times when sharp-tailed snakes are most often encountered. Sharp-tailed snakes may aestivate during mid-summer (Cook 1960). A brief period of winter inactivity occurs in most areas.

Seasonal Movements/Migration: Predictable seasonal movements have not been reported for this species in California. Some long-distance movements may occur as individuals move to known refuges for aestivation or hibernation.

Home Range: The nature of the home range for this species is unknown.

Territory: No evidence for the territorial defense of resources has been reported. Individuals often aggregate at favorable sites. It is not uncommon to find several individuals under a single small, flat rock.

Reproduction: Little information on the timing of reproductive events is available, but it appears that eggs are laid in the summer and hatching occurs in the fall. Females probably produce 3 to 5 eggs. Nussbaum et al. (1983) present evidence indicating that on some occasions more than one female may deposit eggs at a single nest.

Niche: Because of thermal and moisture preferences sharp-tailed snakes are active at different times and in different microhabitats than most other snakes. Stebbins (1954) suggested that the habitat and activity patterns of the sharp-tailed snake resemble somewhat that of western plethodontid salamanders. The range of the ringneck snake and the sharp-tailed snake largely overlap, and they may even be found under the same cover, but the dietary specialization of sharp-tailed snakes probably all but eliminates competition for food between the two species. Sharp-tailed snakes are occasionally eaten by other snakes, diurnal birds, and small mammals.

Comments: It has been suggested by Cook (1960) that under some circumstances sharp-tailed snake respond positively to human activity in suburban residential areas, especially where backyard environments provide moisture and cover, and enhance populations of the introduced slug Arion, on which certain populations of sharp-tailed snakes may feed exclusively.

#### REFERENCES

- Cook, S. F., Jr. 1960. On the occurrence and life history of Contia tenuis. Herpetologica 16:163-173.
- McLean, D. D. 1927. Sharp-tailed snake in the vicinity of Yosemite. Yosemite Nat. Notes 6:38.
- Nussbaum, R. A., E. D. Brodie, Jr., and R. M. Storm. 1983. Amphibians and reptiles of the Pacific Northwest. Univ. Press of Idaho. 332pp.
- Stebbins, R. C. 1954. Amphibians and reptiles of western North America. McGraw-Hill, New York. 536pp.
- Zweifel, R. G. 1954. Adaptation to feeding in the snake Contia tenuis. Copeia 1954:299-300.